



A.D. 1857, 26th NOVEMBER. N^o 2949.

SPECIFICATION

OF

WILLIAM THOMAS MANNING.

—

TREATMENT OF SEWERAGE, &c.

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Treatment of Sewerage, &c.

(This Invention received Provisional Protection, but notice to proceed with the application for Letters Patent was not given within the time prescribed by the Act.)

PROVISIONAL SPECIFICATION left by William Thomas Manning at the Office of the Commissioners of Patents, with his Petition, on the 26th November 1857.

I, WILLIAM THOMAS MANNING, of 20, Great George Street, in the City of
5 Westminster, Gentleman, do hereby declare the nature of the said Invention for “IMPROVEMENTS IN THE TREATMENT OF SEWERAGE, AND IN THE APPARATUS EMPLOYED THEREIN,” to be as follows :—

This Invention relates to an improved system or mode of treating sewerage, whereby its solid particles are separated from the fluid matter, and the latter
10 is deoderised and rendered clear and innoxious. I propose accomplishing this end by the aid of a peculiar construction and arrangement of pneumatic pressure apparatus, which effectually filters and deoderizes the sewerage.

This apparatus consists of a strong vessel constructed of boiler plate, and having its bottom and sides perforated with a number of holes. It is closed
15 at the top, and is surrounded at the parts which are perforated by a woollen or other suitable cloth, which is stretched over the outer surface of the vessel. This vessel is placed within a second perforated vessel of similar construction to the first, and furnished also with a woollen, cloth, or other suitable strainer ; a space is left between the bottom and sides of the two vessels, which space is
20 filled in with animal charcoal or other disinfectant. Two pipes open into the top of the inner vessel, the one serving to admit the sewerage which is forced

Manning's Impts. in the Treatment of Sewerage, and in Apparatus used therein.

in by means of force pumps, whilst the other pipe admits compressed air into the vessel, which air is also forced in at a considerable pressure by the aid of air pumps. At the bottom of the inner vessel is a discharge pipe for the delivery or discharge of the solid matter into hermetically closed barges, or other convenient receptacles for the removal of the same. A cock or valve 5 is fitted to the discharge pipe and to the sewerage pipe, so that when the vessel is full the supply cock may be closed, and the pneumatic pressure will force the fluid matter through the perforations and charcoal into a third outer chamber or tank, where the water, now made pure and clear, is collected, and thence runs off in an innoxious state. The solid matter collects in the inner 10 vessel and is forced through the discharge pipe, when the cock or valve is opened by the pressure above referred to; suitable outlet pipes may be used for carrying off the gases if found desirable. In order to prevent the choking of the pipes which supply the vessel with sewerage, I propose to construct depositing tanks at the mouths of the sewers; such tanks being fitted with 15 gratings which will trap all large refuse matter and allow the ordinary solid matter to pass through to the bottom of the tank, where agitators are used for keeping the sediment from depositing. By this means the finer portion of the solid matter is kept well stirred, and is drawn up by the pumps, whilst the larger portions of the solid matter may be periodically removed by lifting up 20 the grating with the matter upon it and inserting another one. To facilitate this suitable shafts may be sunk at those places where the depositing tanks and gratings exist. The sewerage matter collected and carried off in the barges, before referred to, may afterwards be dealt with in any manner for the purpose of rendering the same applicable to the purposes of manure, &c. 25

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